

Name: \_\_\_\_\_

Date: \_\_\_\_\_

### Compound Interest Practice

1. Latrell deposits \$4,621 into a bank with a 2.3% annual interest rate. If the interest is compounded annually, how much money will Latrell have in the bank after nine years?

Step 1: Change your interest rate to a decimal (divide by 100 or move the decimal point to the left two places).

Step 2: Add one to the decimal.

Step 3: Substitute your values into the compound interest equation:  $y = ab^x$  and use your calculator to evaluate. DO NOT ROUND until the end.

2. Chris deposits \$5,100 into a bank with a 2.9% annual interest rate. If the interest is compounded annually, how much money will Chris have in the bank after ten years?

3. Sabria deposits \$10,700 into a bank with a 2.2% annual interest rate. If the interest is compounded semi-annually, how much money will Sabria have in the bank after five years?

Step 1: Change your interest rate to a decimal (divide by 100 or move the decimal point to the left two places).

Step 2: Since the interest is compounded SEMI-ANNUALLY, divide your decimal by two. Then, ADD ONE.

Step 3: Since the interest is compounded semi-annually, MULTIPLY the number of years by two.

Step 4: Substitute your values into the compound interest equation:  $y = ab^x$  and use your calculator to evaluate. DO NOT ROUND until the end.

4. Aaron deposits \$8,760 into a bank with a 3.2% annual interest rate. If the interest is compounded semi-annually, how much money will Aaron have in the bank after six years?

5. Tona deposits \$2,900 into a bank with a 2.8% annual interest rate. If the interest is compounded quarterly, how much money will Tona have after eight years?

Step 1: Change your interest rate to a decimal (divide by 100 or move the decimal point to the left two places).

Step 2: Since the interest is compounded QUARTERLY, divide your decimal by four. Then, ADD ONE.

Step 3: Since the interest is compounded quarterly, MULTIPLY the number of years by four.

Step 4: Substitute your values into the compound interest equation:  $y = ab^x$  and use your calculator to evaluate. DO NOT ROUND until the end.

6. Kayla deposits \$12,093 into a bank account with a 2.4% annual interest rate. If the interest is compounded quarterly, how much money will Kayla have in the bank after two years?

7. Mani deposits \$6,510 into a bank account with a 2.4% annual interest rate. If the interest is compounded monthly, how much money will Mani have in the bank after ten years?

Step 1: Change your interest rate to a decimal (divide by 100 or move the decimal point to the left two places).

Step 2: Since the interest is compounded MONTHLY, divide your decimal by 12. Then, ADD ONE.

Step 3: Since the interest is compounded monthly, MULTIPLY the number of years by 12.

Step 4: Substitute your values into the compound interest equation:  $y = ab^x$  and use your

calculator to evaluate. DO NOT ROUND until the end.